

# **LOWER NACHES RIVER CED RETROFIT**

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## **INTRODUCTION**

The Lower Naches River retrofit site is along the lower 3.75 miles of the Naches River near Yakima. US Highway (US 12) 12 runs parallel to the river for much of this area and is located within the historic floodplain. US 12 is a main transit route for local, commercial, and tourist traffic.

## **THE CED PROBLEM**

The lower 3.75 miles of the Naches River is very dynamic, frequently changing channel configuration and location over time. Channel migration and reach-scale fluvial processes have led to the loss of riparian buffers between US 12 and the river in the project area. Periodic erosion of portions of the highway prism has occurred along this stretch.

Management actions to protect the highway have included the placement of gabions, rock revetment and rock groins and/or barbs and have resulted in the temporary stabilization of the road prism in some locations. While these corrective actions have maintained US 12 as a transportation route, WSDOT has recognized that these installations are not providing a long-term solution and may be contributing to habitat degradation.

The relationship between US 12 and the Naches River has been evaluated by defining past, present, and future areas of concern with respect to road failures and/or maintenance needs along with environmental degradation and/or recovery. In addition, the environmental conditions of the riparian zone were evaluated and used as a proxy for the level of environmental degradation and/or protection that exists through the project area. Because of the variability

of conditions through the site, the project area was delineated into categories of physical risk to the roadway and environmental deficiency.

## **FISH UTILIZATION & HABITAT AVAILABILITY**

The Naches River system supports spring Chinook, fall Chinook (presumed presence), summer steelhead, and bull trout, as well as several other salmonid and non-salmonid species. Both steelhead and bull trout in the Naches are listed as threatened under the federal Endangered Species Act. Despite the Federal ESA listing status, the Washington Department of Fish and Wildlife (WDFW) found that spring Chinook populations in the Naches River are depressed based on chronically low escapement. The same report describes summer steelhead populations in the Naches River as one of five distinct populations identified in the Yakima Basin and states that steelhead populations are depressed based on chronically low wild spawner escapement. Both species are native stocks sustained by wild production.

Due to habitat limiting factors that have been identified, the following action recommendations will be incorporated into the retrofit project:

- Protect/preserve ecological integrity of critical floodplain reaches
- Where possible, remove/relocate roads currently in the floodplain to outside the floodplain
- Develop and implement a short term LWD strategy to restore LWD presence and habitat diversity
- Ensure that floodplain hazard planning and strategies consider and adequately protect salmonid habitat

### ONGOING WORK

A Site and Reach Assessment has been conducted by GeoEngineers and the Integrated Streambank Protection Guidelines (<http://wdfw.wa.gov/hab/ahg/ispgdoc.htm>) concepts were used to address the overall project objectives. It is anticipated that the outcome of the project will result in meeting the necessary requirements to protect US 12 and provide environmental enhancements to this reach of the river. This project has been partially funded and a funding request package has been sent to the legislature for the additional funds to construct this project during the 2005-2007 biennium. An intergovernmental partnership is also under way to coordinate this effort with other river projects being planned by Yakima County and the City of Yakima.



View of SR 12, Naches River CED site facing downstream.



View of SR 12, Naches River CED site under flood conditions facing upstream.



View of SR 12, Naches River CED site facing downstream.